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REFERENCE & ASSOCIATES  
PATENT FILING TRANSMITTAL

DOCKET NO. YOR9-2000-0138US1

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Box Patent Application  
Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**PATENT FILING TRANSMITTAL**

Transmitted herewith for filing is the Patent Application of: Martin G. Kienzle, Raymond E. Rose, Jr., and  
Olivier Verscheure

For: CREDIT BASED MEDIA PRESENTATION



**TYPE OF FILING**

**This new patent application is for a(n):**

- ☒ Utility
- ☐ Design
- ☐ Plant
- ☐ Divisional
- ☐ Continuation
- ☐ Continuation-in-part

**Benefit of a prior filed application**

- ☐ This application claims the benefit of an earlier filed U.S. Patent Application under 35 USC 120.
- ☐ Please accord Applicant the benefit of the priority date of \_\_\_\_\_ to this case pursuant to 35 USC 119. Applicant's claim for priority is based on application \_\_\_\_\_ filed in \_\_\_\_\_ on that date.

**Filing under 37 CFR 1.53 (Utility) or 37 CFR 1.153 (Design)**

- ☒ This is an application filed pursuant to 37 CFR 1.53 or 37 CFR 1.153, permitting receipt of a filing date upon filing of a specification, at least one claim and necessary drawings.
- ☒ In the event any parts of this application are incomplete, please treat this as a filing under 37 CFR 1.53 or 37 CFR 1.153.

**ENCLOSURES**

- ☒ 13 - pages of written description;
- ☒ 8 - pages of claims;
- ☒ 1 - pages of abstract;
- ☐ \_\_\_\_\_ - sheets of formal drawings;
- ☒ 4 - sheets of informal drawings;
- ☒ Declaration and Power of Attorney or listing of inventors;
- and**
- ☒ Two postcards for return to us as proof of receipt of the above documents.

**plus**

- ☒ An Assignment of the invention to IBM Corporation and an Assignment cover sheet;
- ☐ Verified Statement Claiming Small Entity Status (37 CFR 1.9(f) and 1.27(b))

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- ☒ Form PTO-1449 (IDS) and two copies of the references listed thereon;  
☐ A certified copy of \_\_\_\_\_ (country) patent application number (priority document).  
☐ A preliminary amendment;  
☐ Declaration of Biological Deposit;  
☐ Submission of sequence listing, computer readable copy and/or amendment relating thereto for biotechnology invention containing nucleotide and/or amino acid sequence;  
☐ An associate power of attorney;  
☐ Other.

### DECLARATION OR OATH

The enclosed Declaration or Oath has been executed by:

- ☒ Inventor(s);  
☐ Legal representative of the inventors (37 CFR 1.42 or 1.43);  
☐ Joint inventor or person showing proprietary interest on behalf of an inventor who refused to sign or who cannot be reached and this is a petition required by 37 CFR 1.47 and the statement required by 37 CFR 1.47 is attached;  
☐ Has not been executed and is enclosed for the purposes of identifying the inventors.

### INVENTORSHIP STATEMENT

The inventorship for all the claims in this application is:

- ☐ the same;  
☐ not the same and, as an explanation, a statement is/ will be submitted.

### LANGUAGE

The application submitted herewith is:

- ☒ in English;  
☐ in not in English and in terms of 37 CFR 1.52(d) a verified translation is  
☐ attached  
☐ not attached.

### FEE CALCULATION

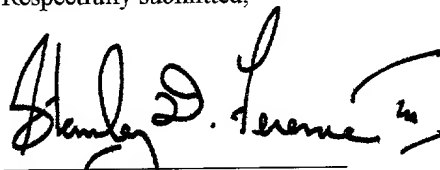
The filing fee has been calculated as shown below:

				SMALL ENTITY OR		OTHER THAN A	
				SMALL ENTITY		SMALL ENTITY	
				RATE	FEE	RATE	FEE
BASIC FEE Design Patent				\$155	\$	\$310	\$
BASIC FEE Utility Patent				\$345	\$	\$690	\$690
EXTRA FEES				RATE	FEE	RATE	FEE
TOTAL CLAIMS	28	MINUS 20=	8	x 9=	\$0	x18=	\$162
INDEP. CLAIMS	3	MINUS 3 =	0	x 39=	\$0	x78=	\$0
<input type="checkbox"/> MULTIPLE DEP. CLAIM				+135=	\$	+270=	\$
<input checked="" type="checkbox"/> ASSIGNMENT				+ 40=	\$	+40=	\$40
<input type="checkbox"/> RULE 53 SURCHARGE				+ 65=	\$	+130=	\$
TOTAL					\$		\$874

**FEE PAYMENT**

[X] Attached is Check No. 5585 in the sum of \$874.00 to cover the filing fee and, if applicable, the assignment fee.

Respectfully submitted,



Stanley D. Ference III  
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Dated: May 25, 2000

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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant(s) : Martin G. Kienzle et al      Group Art: not yet assigned  
Serial No. : not yet assigned      Examiner: not yet assigned  
Filed : herewith  
For : CREDIT BASED MEDIA PRESENTATION

**EXPRESS MAIL CERTIFICATE**

Express Mail Label No. EL503717258US

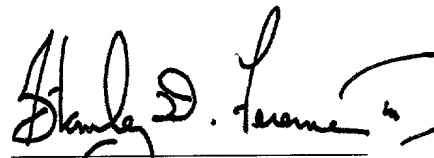
Date of Deposit 25 May 2000

I hereby certify that the following attached paper(s) or fee:

Patent Application  
Written Description  
Claims 1-28  
Abstract  
Drawings (Figs. 1-4)  
Declaration and Power of Attorney  
Information Disclosure Statement  
Information Disclosure Statement  
PTO Form 1449  
Two copies of cited references  
Assignment with Cover Sheet  
Patent Filing Transmittal  
Certificate of Express Mail  
Two Return Postcards  
Check No. 5585 the amount of \$874.00

are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service  
under 37 C.F.R. 1.10 on the date indicated above and is addressed to the Assistant Commissioner for  
Patents, Washington, D.C. 20231.

Stanley D. Ference III  
(Typed or printed name of  
person mailing paper)



(Signature of person mailing  
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## **CREDIT BASED MEDIA PRESENTATION**

### **Field of the Invention**

The present invention relates generally to digital multimedia streams distribution, and more particularly to an apparatus and method to present such streams to a customer  
5 based upon a predetermined cost factor for media already presented.

### **Background of the Invention**

Commercial television and radio broadcasts are typically funded by advertisers who assume that the program content being broadcast will attract a certain number of viewers or listeners, who will then continue watching or listening as the advertisers' commercials are broadcast. This model has clear weaknesses, since there is no assurance  
10 that the audience are actually paying attention to the commercials. Large portions of the audience may have been mis-targeted and have no reason to buy the product being advertised. Additionally, they may not appreciate the implicit social contract of commercial-based broadcast, and resent commercials as an intrusion into their  
15 viewing/listening experience. However, this model has worked well enough to provide profits for broadcasters and advertisers, and as long as no means of improving upon it was available, it has persisted.

As video and audio streams in television switch to digital encoding, the home television setup will include a Set-Top Box (STB), which is a type of special-purpose computer designed to convert a digital data stream into the audio and video signals that make up a TV broadcast. It is also possible to install an adapter card in a computer to  
5 cause it to act as an STB. These data streams may also include data to be used by computer, or STB, applications. The computer or STB may also include a storage device, such as a disk, on which content can be recorded for later presentation.

As a result of this use of such a digital data stream and a computer or STB to process it, the traditional advertising-based TV model faces certain problems and  
10 opportunities. Among the problems are technology that makes it easy to automate the deletion of commercials from the media during presentation. Among the opportunities are the interactive capabilities of computers and STB's, which enable broadcasters and advertisers to target their advertising more efficiently. Another significant capability that generally accompanies digital TV systems is the capability for the receiving computer or  
15 STB to communicate with the content provider, either through a hardware backchannel (as in a cable system) or through the Internet.

A need has thus been recognized in conjunction with responding to the aforementioned opportunities.

## **Summary of the Invention**

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The present invention, in accordance with at least one presently preferred embodiment, exploits the interactive capabilities of computers and STB's to provide a more cost-effective manner of targeting advertisements to prospective customers, compensating content providers for the value of their broadcast content, and giving consumers a choice as to how they wish to pay for their media experience. Specifically, all media delivered by the broadcaster are preferably assigned a value from the consumer's point of view. Entertainment or information content is assumed to have a positive value. The consumer is likely to exchange something of value for the privilege of experiencing it. Advertising content is assumed to have a negative value. The consumer expects to be compensated for the time spent experiencing it.

Consequently, the present invention broadly contemplates a method whereby a computer maintains an "account" of the positive- and negative-value content that has been presented to the consumer, and uses the balance in that account to determine the rules for future behavior of the presentation device.

In one aspect, the present invention provides an apparatus for regulating electronic media content, the apparatus comprising: an interface arrangement which receives media input; a controller which attributes at least one credit value to at least one portion of

received media input; and a regulator which regulates the presentation of received media input at a presentation medium based on the at least one credit value attributed to the at least one portion of received media input.

In another aspect, the present invention provides a method of regulating electronic  
5 media content, the method comprising the steps of: receiving media input; attributing at least one credit value to at least one portion of received media input; and regulating the presentation of received media input at a presentation medium based on the at least one credit value attributed to the at least one portion of received media input.

In an additional aspect, the present invention provides a program storage device  
10 readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for regulating electronic media content, the method comprising the steps of: receiving media input; attributing at least one credit value to at least one portion of received media input; and regulating the presentation of received media input at a presentation medium based on the at least one credit value attributed to  
15 the at least one portion of received media input.

For a better understanding of the present invention, together with other and further features and advantages thereof, reference is made to the following description, taken in



conjunction with the accompanying drawings, and the scope of the invention will be pointed out in the appended claims.

### **Brief Description of the Drawings**

Figure 1 schematically illustrates a process of gathering content at the broadcast  
5 site and transmitting it to the receiver;

Figure 2 schematically illustrates a process for selecting content to be presented;

Figure 3 schematically illustrates a mechanism for presenting and accounting for  
the content; and

Figure 4 schematically illustrates a generic implementation of an embodiment of  
10 the present invention.

### **Detailed Description of the Preferred Embodiments**

As shown in Figure 1, a television broadcast station has a mix of credit-bearing  
content 110, which may typically include commercials, and debit-bearing content 120,  
which may typically include entertainment or informational programming (*e.g.*, sitcoms,  
15 news, sportscasts, etc.). Both types of content are combined into a stream 130, to be  
broadcast by the transmitter 200. If the technology permits (as when the transmission is in

digital format), multiple pieces of content may be broadcast simultaneously. When the signal is received by the receiver 400, it may be sent to an output device immediately or stored on a recording device 410, such as a VCR or a digital recorder. During this entire process, no accounting of credits or debits is performed, since the media are not being presented.

As shown in Figure 2, the content is streamed from the receiver to a presentation device. The selectable content includes broadcast channels being received through an antenna 300, or pre-recorded content 410. The person 900 viewing the content is able to choose either pre-recorded content or live content through a switcher 500 (*e.g.*, by prompting the switcher via remote control). The selected content is streamed at 600, to the presentation controller 700, for presentation at, for example, a TV screen 800. A presentation controller 700 could be embodied, for example, by a set top box such as a cable converter box commonly encountered in U.S. cable TV systems, but with additional characteristics as described herein. Each piece of selected content preferably has a credit or debit value associated with it. A "piece" of content may be defined, for instance, as a TV show or segment thereof or as a single TV commercial, etc. A TV show, in this case, may be broken into segments of any size for the purpose of applying credits until they run out. The entire show may also be considered a single "piece" so that the credit

determination would be made before presenting the show, thereby ensuring that the show would not be terminated at some intermediate point during its transmission.

As shown in Figure 3, the content selected by the viewer is preferably transmitted at 600, from the viewer-controlled switcher 500, to the presentation controller, 700. A  
5 cost adjuster 1010, in the presentation controller, preferably examines the cost factor data accompanying each piece of content to be presented. The cost adjuster 1010, particularly, preferably applies numerical values that accompany content as well as rules that cause the numeric cost factor to be influenced by the current context.

In one implementation of the present invention, the presentation controller 700  
10 may be programmed with information about the viewer's demographic profile and preferences. Based upon that information, the cost adjuster could apply a higher credit value for advertisements that are more likely to be of interest to the viewer. For debit-bearing content, the cost adjuster may also influence the debit value associated with the content. For example, the debit value of a movie may be highest when it is first released,  
15 and then decline with the passage of time.

After the cost adjuster has produced a debit or credit factor for the content being presented, the current balance (indicated at 1030), is preferably updated accordingly. Finally, the presentation filter 1020 preferably examines the current balance and the

credit/debit value of the content to be presented. The presentation filter 1020 will then act according to a set of rules determined by the broadcaster. In one implementation, the presentation filter 1020 may present visual or audio warnings to the viewer as the current balance begins to approach zero. If the viewer is not deemed sufficiently "creditworthy",

5 the presentation filter may suspend all presentation of debit-bearing content when the current balance reaches zero. On the other hand, a viewer with a better "credit rating" may continue viewing content with a negative balance. Another possible set of rules may allow the viewer to view content in a degraded manner, thereby maintaining the viewer's interest while providing an incentive to obtain credits so as to be able to view the content

10 without degradation.

To accommodate viewers who wish to obtain their credits without viewing advertisements, the presentation controller also accepts "other cost factors" 1000. These are preferably delivered to the presentation controller 700 by the broadcaster. They may include cash payments from the viewer, prizes from contests, or "free credits" as the result

15 of various promotional campaigns.

The embodiments of the present invention are believed to be useful in essentially any application where multimedia content is to be delivered to an audience, and the content provider seeks compensation for delivering such content. Since the term

“multimedia” encompasses types of content that are believed to hold a typical consumer’s attention, we can assume that such consumers are good targets for advertising. Further, since the presence of a computer or STB is assumed, it is possible to store in such a device information about the consumer’s demographics, preferences, and buying habits. In the  
5 implementation described here, the multimedia content takes the form of a television broadcast.

Figure 4 illustrates a system, in accordance with an embodiment of the present invention, for receiving and decoding content after it is received by terrestrial, cable, or satellite broadcast. (It should be noted that the embodiments of the present invention tend  
10 to focus upon the presentation of media to the consumer, and not the delivery of such media to the consumer’s premises.) Therefore, the consumer is free to record any content on a recording device such as a VCR, and is not debited until the content is played on a television. In this instance, the content may originate from a broadcast source 1100, or a storage device such as a digital VCR 1200. The content may include essentially any  
15 mixture of debit- and credit-bearing segments. Each piece of content is preferably accompanied by digital information describing its relative value and rules for adjusting that value. The content is preferably transferred electronically (at 1300 and 1400) to a switching device 1500 controlled by the consumer 1000. This device determines which content to present at any given time. It then delivers it (at 600) to the presentation

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controller 700. The cost adjuster 1010 may preferably modify the cost factors that  
accompany the media. For example, repeated viewings of the same advertisement would  
have lower credit values than the first viewing. On the other hand, an advertisement being  
presented to a customer who is known to be in a demographic group that has a high  
5 probability of purchasing the advertised product would have a high credit value.

Preferably, the presentation filter 1020 monitors the current account value 1030  
and may halt presentation of media on the TV 800, or may present it in a degraded form if  
the current account falls below a specified threshold. The content provider can control the  
behavior of the presentation filter 1020. Such behavior would be influenced primarily by  
10 the current balance 1030, which is continually being updated based upon the media being  
presented. The threshold used by the presentation filter 1020 need not be zero if the  
consumer has a good "credit rating".

Preferably, a credit rating in this connection could be determined by the service  
provider (*e.g.*, a cable "broadcaster" or "cable head-end"). The credit rating would thus  
15 be a variable in setting the rules for presentation of the content. It is likely that the  
presentation controller may not be explicitly aware of a variable known as "credit rating",  
but would perhaps be aware of certain variables in its rules that permit it to dip below a

credit value of zero. The below-zero rules for a particular presentation controller 700 can be downloaded thereto as simple data at any time, along with digital video content.

A consumer who chooses not to view any advertisements may do so, but will pay higher fees. The credits obtained in this manner will be applied along with all other credits  
5 obtained by means other than media presentation. They are depicted in this illustration by “other cost factors” 1000.

As a possible working embodiment in accordance with the present invention, a presentation controller 700 may be embodied by a cable set-top box and the presentation medium 800 may be a television. A viewer may earn “credits” towards the capability of  
10 viewing “valuable” television shows (*e.g.*, those that correspond to his or her interests, relatively new movies, etc.) by watching commercials. He or she, however, may have the option of bypassing commercials and, instead, paying an extra fee (*e.g.*, as part of a monthly cable bill). Credits and debits will preferably be applied only when content is watched (*e.g.*, when the TV set is on and a show is in progress or when a video is being  
15 watched, but not when a VCR is recording a TV show and the TV set is [*i.e.*, live audio and video] is switched off). Preferably, all rules relating to credits and debits will be enforced by the cable provider in this instance, but will be applied by the set-top box.





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It is to be understood that the present invention, in accordance with at least one presently preferred embodiment, includes an interface arrangement which receives media input, a controller which attributes at least one credit value to at least one portion of received media input, and a regulator which regulates the presentation of received media input at a presentation medium based on the at least one credit value attributed to the at least one portion of received media input. Together, these may be implemented on at least one general-purpose computer running suitable software programs. These may also be implemented on at least one Integrated Circuit or part of at least one Integrated Circuit. Thus, it is to be understood that the invention may be implemented in hardware, software, or a combination of both.

If not otherwise stated herein , it is to be assumed that all patents, patent applications, patent publications and other publications mentioned and cited herein are hereby fully incorporated by reference herein as if set forth in their entirety herein.

Although illustrative embodiments of the present invention have been described herein with reference to the accompanying drawings, it is to be understood that the invention is not limited to those precise embodiments, and that various other changes and modifications may be affected therein by one skilled in the art without departing from the scope or spirit of the invention.

## **Claims**

What is claimed is:

1. An apparatus for regulating electronic media content, said apparatus comprising:

5 an interface arrangement which receives media input;

a controller which attributes at least one credit value to at least one portion of received media input; and

a regulator which regulates the presentation of received media input at a presentation medium based on the at least one credit value attributed to the at least one  
10 portion of received media input.

2. The apparatus according to Claim 1, wherein:

said controller is adapted to attribute a positive credit value to received media input construed as credit-bearing content; and

said controller is adapted to attribute a negative credit value to received media  
15 input construed as debit-bearing content.

3. The apparatus according to Claim 2, wherein:

said controller is adapted to attribute a credit rating associated with an end user of the presentation medium; and

said regulator is adapted to control the presentation of received media input based  
5 on the attributed credit rating.

4. The apparatus according to Claim 3, wherein the credit rating represents a threshold value and said regulator is adapted to cease the presentation of debit-bearing content upon the threshold value being breached.

5. The apparatus according to Claim 2, wherein:

10 media input received at said interface arrangement bears an initial credit value; and

said controller is adapted to adjust the initial credit value of received media input based on at least one predetermined criterion for adjusting the initial credit value of received media input.

6. The apparatus according to Claim 2, wherein said controller is adapted to:

15 attribute a credit balance to an end user of the presentation medium;

monitor the presentation of received media input at the presentation medium; and

adjust the credit balance based on the presentation of received media input at the presentation medium.

7. The apparatus according to Claim 6, wherein said controller is adapted to  
5 subtract from the credit balance upon debit-bearing content being presented at the presentation medium and add to the credit balance upon credit-bearing content being presented at the presentation medium.

8. The apparatus according to Claim 6, wherein:

the received media input includes pre-recorded media content; and

10 said regulator comprises a decoder for decoding the pre-recorded media content, as to permit the presentation of the content, based on the credit balance.

9. The apparatus according to Claim 6, wherein said controller is further adapted to adjust the credit balance based on factors external to the received media input.

10. The apparatus according to Claim 1, wherein the presentation medium is a  
15 television.

11. The apparatus according to Claim 10, wherein the received media input includes at least one of: a television commercial and at least a portion of a television show.

12. The apparatus according to Claim 10, wherein said controller comprises a set-top cable TV converter box.

13. The apparatus according to Claim 1, wherein the presentation medium is a computer monitor.

14. The apparatus according to Claim 13, wherein the received media input includes internet multimedia content.

15. A method of regulating electronic media content, said method comprising the steps of:

receiving media input;

attributing at least one credit value to at least one portion of received media input;

and

regulating the presentation of received media input at a presentation medium based on the at least one credit value attributed to the at least one portion of received media input.

16. The method according to Claim 15, wherein:

5       said attributing step comprises:

          attributing a positive credit value to received media input construed as credit-bearing content; and

          attributing a negative credit value to received media input construed as debit-bearing content.

10       17. The method according to Claim 16, further comprising the steps of:

          attributing a credit rating associated with an end user of the presentation medium;  
and

          said regulating step comprising the step of controlling the presentation of received media input based on the attributed credit rating.

18. The method according to Claim 17, wherein the credit rating represents a threshold value and said controlling step comprises ceasing the presentation of debit-bearing content upon the threshold value being breached.

19. The method according to Claim 16, wherein media input received at said  
5 interface arrangement bears an initial credit value and said method further comprises the step of adjusting the initial credit value of received media input based on at least one predetermined criterion for adjusting the initial credit value of received media input.

20. The method according to Claim 16, further comprising the steps of:  
attributing a credit balance to an end user of the presentation medium;  
10 monitoring the presentation of received media input at the presentation medium;  
and  
adjusting the credit balance based on the presentation of received media input at the presentation medium.

21. The method according to Claim 20, further comprising the steps of subtracting  
15 from the credit balance upon debit-bearing content being presented at the presentation medium and adding to the credit balance upon credit-bearing content being presented at the presentation medium.

22. The method according to Claim 20, wherein:

the received media input includes pre-recorded media content; and

said method further comprises the step of decoding the pre-recorded media content, as to permit the presentation of the content, based on the credit balance.

5           23. The method according to Claim 20, further comprising the step of adjusting the credit balance based on factors external to the received media input.

24. The method according to Claim 1, wherein the presentation medium is a television.

25. The method according to Claim 24, wherein the received media input includes  
10   at least one of: a television commercial and at least a portion of a television show.

26. The method according to Claim 1, wherein the presentation medium is a computer monitor.

27. The method according to Claim 26, wherein the received media input includes internet multimedia content.



28. A program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for regulating electronic media content, said method comprising the steps of:

receiving media input;

5       attributing at least one credit value to at least one portion of received media input;

and

regulating the presentation of received media input at a presentation medium based on the at least one credit value attributed to the at least one portion of received media input.

10

## **CREDIT BASED MEDIA PRESENTATION**

### **Abstract of the Disclosure**

A method for monitoring and controlling the presentation of electronic media according to a credit-based scheme. "Debit-bearing" media may include video, audio, 5 interactive software, etc. "Credit-bearing" media typically include commercials or banner ads. Other credit factors include cash, prizes, etc. The customer determines how to accumulate credits and how to spend them.

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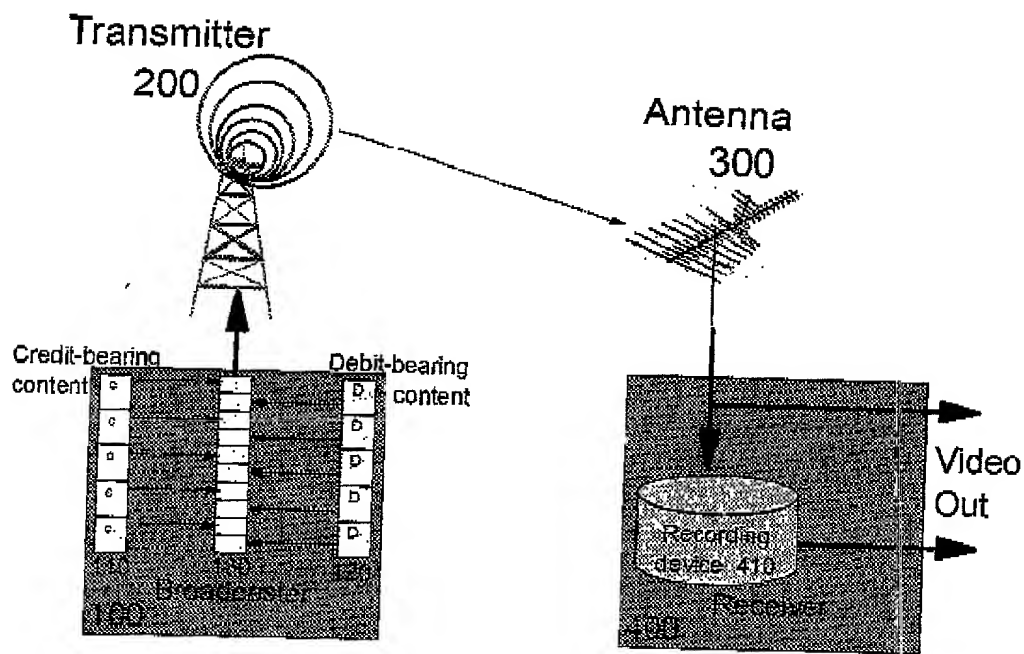


FIG. 1

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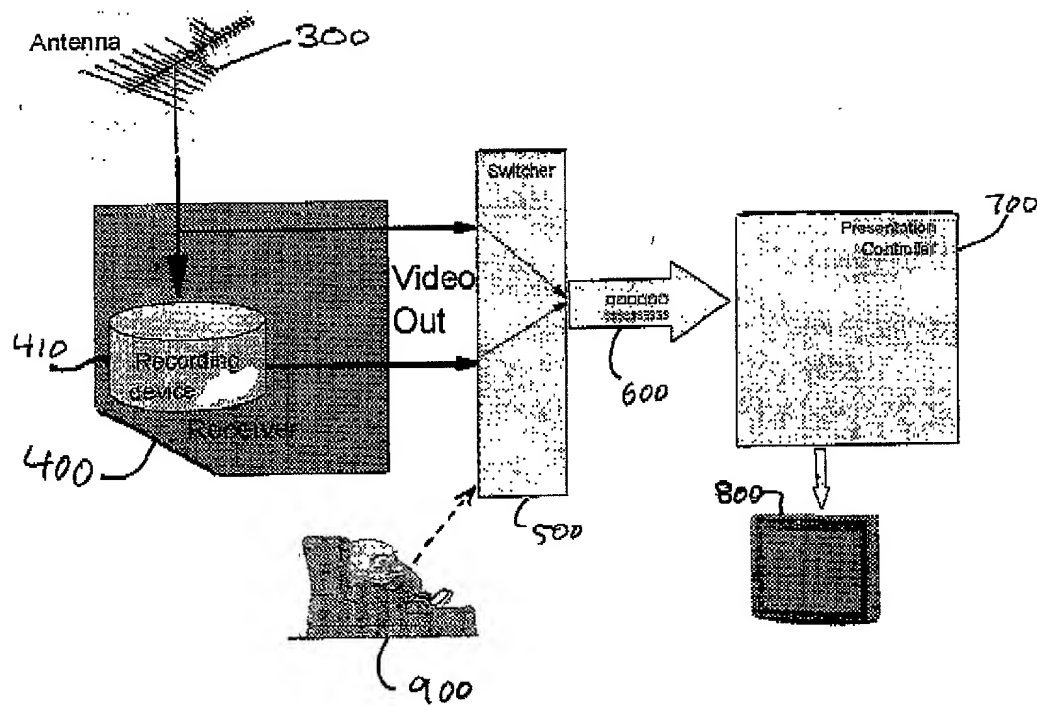


FIG. 2

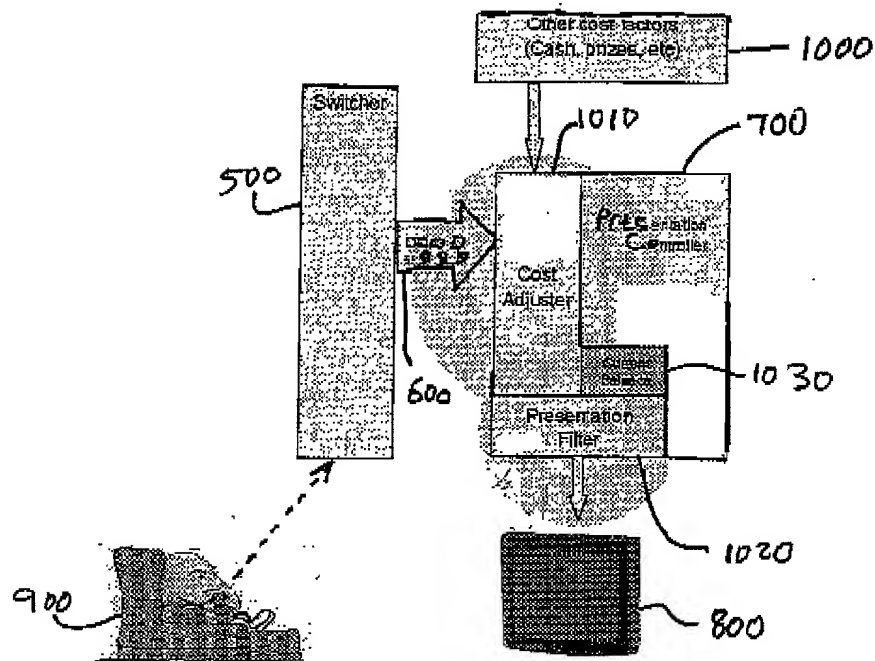


FIG. 3

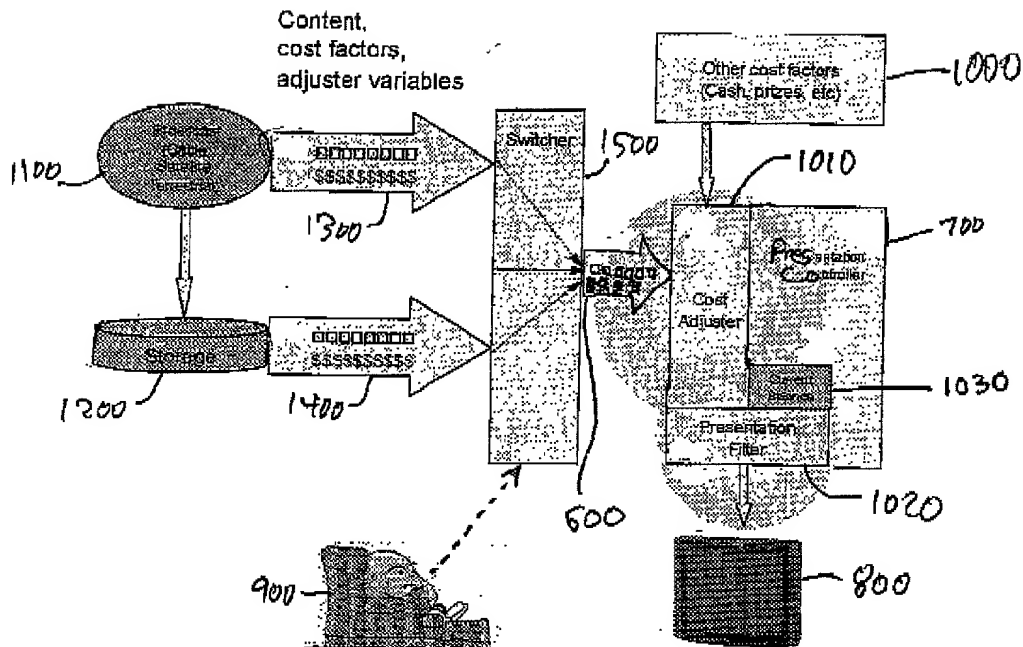


FIG. 4

**DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION**

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name;

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**CREDIT BASED MEDIA PRESENTATION**

the specification of which (check one)

☒ is attached hereto.

\_\_\_\_\_ was filed on \_\_\_\_\_ as International Business Machines Docket No. YOR9-2000-0138US1

and was amended on \_\_\_\_\_ (if applicable)

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with Title 37, Code of Federal Regulations, Section 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, §119(a)-(d) or §365(b) of any foreign application(s) for patent or inventor's certificate, or §365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application, having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s)			Priority Claimed	
_____	_____	_____	<input type="checkbox"/> Yes	<input type="checkbox"/> No
(Number)	(Country)	(Day/Month/Year Filed)		
_____	_____	_____	<input type="checkbox"/> Yes	<input type="checkbox"/> No
(Number)	(Country)	(Day/Month/Year Filed)		
_____	_____	_____	<input type="checkbox"/> Yes	<input type="checkbox"/> No
(Number)	(Country)	(Day/Month/Year Filed)		

I hereby claim the benefit under 35 U.S.C. §119(e) of any United States provisional application(s) listed below.

_____	_____
(Application Number)	(Filing Date)
_____	_____
(Application Number)	(Filing Date)

DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

I hereby claim the benefit under 35 U.S.C. §120 of any United States Application(s), or §365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States, or PCT International application in the manner provided by the first paragraph of 35 U.S.C. §112, I acknowledge the duty to disclose information material to the patentability of this application as defined in 37 CFR §1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

\_\_\_\_\_  
(Application Serial No.)                      (Filing Date)                      (Status) (patented, pending, abandoned)

\_\_\_\_\_  
(Application Serial No.)                      (Filing Date)                      (Status) (patented, pending, abandoned)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that willful false statements may jeopardize the validity of the application or any patent issued thereon.

POWER OF ATTORNEY: As a named inventor I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith (list name and registration number).

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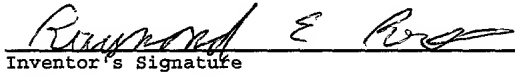
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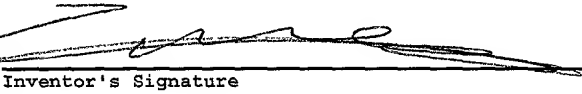
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